

Literature

1. Articles and Whitepapers

The articles and whitepapers are divided into three categories: General Software Reliability

Topics

, Software Reliability

from a Process Approach

, and

Software Reliability from a Testing Approach

. The papers under the general topics provide broad overviews on software reliability. The next two categories provide papers which discuss how software reliability is related to the software development process and testing.

General Software Reliability Topics

- More Reliable Software Faster and Cheaper: An Overview of Software Reliability by John D. Musa. 2003.
- <u>Software Reliability: Dependable Embedded Systems</u> by Jiantao Pan. Carnegie Mellon University, 18-849b. 1999.
- <u>Software Reliability: To Use or Not To Use?</u> A Panel Discussion Chaired by Michael Lyu. CrossTalk. 1995.
- <u>Successful Application of Software Reliability Engineering for the NASA Space Shuttle</u> by Norman F. Schneidewind. International Symposium on Software Reliability Engineering, pp. 71-82. 1997.

Software Reliability from a Process Approach

- <u>Investigation of the Risk to Software Reliability Maintainability of Requirements Changes</u> by Norman F. Schneidewind. International Conference on Software Maintenance, pp. 127-136. 2001.
- Reliability Modeling for Safety Critical Software by Norman F. Schneidewind. IEEE Transactions on Reliability, Vol. 46, No.1, pp. 88-98. 1997.
- <u>Software Metrics and Reliability</u> (ISSRE 1998 Best Paper) by Linda Rosenberg, Ted Hammer, and Jack Shaw. IEEE International Symposium on Software Reliability Engineering. 1998.
- <u>Team Software Process Reliability Results</u> by John B. Goodenough. Software Tech New 3-4.
- <u>Using Failure History to Improve Reliability in Information Technology</u> by Dolores R. Wallace. Software Tech News 3-4.

Software Reliability from a Testing Approach

- <u>Measuring and Evaluating Maintenance Process using Reliability, Risk, and Test Metrics</u> by Norman F. Schneidewind. IEEE Transactions on Software Engineering, Vol. 25, No.6, pp. 768-781. 1999.
- <u>More Reliable, Faster, Cheaper Testing with Software Reliability</u> by John D. Musa. Software Tech News 3-2.
- <u>Software-Reliability-Engineered Testing</u> by John D. Musa and James Widmaier. Crosstalk. 1996.

2. Books

Listed are some selected books covering various topics on software reliability. The books by Lyu and Musa are primarily written for software practitioners, while the book by Peled covers formal methods geared towards researchers at all levels.

- Handbook of Software Reliability Engineering by Michael R. Lyu. Computer Society Press. ISBN: 0-07-039400-8. 1996.
- Software Reliability Engineering: More Reliable Software, Faster Development and Testing by John D. Musa. McGraw-Hill. ISBN: 0-07-913271-5. 1999.
 - Software Reliability Methods by Doron A.

Peled. Springer-Verlag. ISBN: 0-387-95106-7. 2001.

Pham's book provides an excellent introduction on Software Reliability Modeling and gives detailed mathematical descriptions of the models used in the book.

- Software Reliability by Hoang Pham. Springer-Verlag. ISBN: 981-3083-84-0. 2000.

Lastly, the book by Gritzalis is a compilation of the proceedings of the 1997 3rd International Conference for the European Network of Clubs for the Reliability and Safety of Software-Intensive Systems (ENCRESS).

- Reliability, Quality and Safety of Software-Intensive Systems by Dimitris Gritzalis. Chapman and Hall. ISBN: 0-412-80280-5. 1997.